Winter 2000-2001

Upcoming TSI Classes in Oklahoma City:

Transportation of Hazmat -Basic Feb 26-Mar 2, Apr 30-May 4, Jun 11-15, Aug 20-24 -Recurrent Mar 13-15, May 22-24

Motor Carrier Safety Regs Jan 22-26, Mar 12-16, May 7-11

Air Transportation of Hazmat (ICAO/IATA) Mar 20-22, Sep 11-13

Vessel Hazmat / IMDG Code Feb 12-16, Aug 6-10

Instructor Training Feb 21-23, Apr 17-19

Cargo Tanks Jan 22-26

Explosives Jan 30-Feb 2

Performance-Oriented Packaging Feb 13-15, May 8-10

Haz Wastes & Substances June 19-22

Radioactive Materials Apr 17-20

Infectious Substances Jan 10-11, Apr 11-12, Jul 11-12

Cylinders May 2-4, Sep 5-7

Customized and on-site training also available.

For more information, or to receive a training brochure, please contact the TSI Hazardous Materials and Transportation Safety Division.

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2001: A Hazmat Odyssey

Exploring the New ICAO, IATA, and IMO Regs

The year 2001 will see many changes in both the content and format of international hazardous materials transportation regulations. The real challenge will be

Jon Carter applying these changes.

The much anticipated reformatted *International Maritime Dangerous Goods Code* (IMDGC) from the IMO is now available—in two volumes—and will go into effect on January 1st. There is a one-year grace period for switching over from the previous IMDGC (Amendment 29-98), so requirements found in the new edition may be followed in 2001 but are not in full effect until Jan 1, 2002.

The ICAO Technical Instructions For the Safe Transport of Dangerous Goods (the basis for the IATA Dangerous Goods Regulations) normally come out every two years on January 1. New ICAO regs were due to go into effect this January but

that won't happen this year. Because of the overwhelming changes to radioactive material transportation, ICAO has decided to wait another six months before officially issuing its dangerous goods instructions for 2001-2002. So the new *ICAO Technical Instructions*, which are recognized by the US DOT (49 CFR 171.11), will go into effect July 1, 2001. So does this means IATA will wait until July 1st to issue its new regulations? Yes and no.

The 2001 IATA Dangerous Goods Regulations are available now and much of these airline regulations go into effect January 1st. Remember that the IATA DGR are a combination of actual legal regulations taken from the ICAO Technical Instructions and some additional airline industry standards. The additional industry standards not based on ICAO

2001, continued on page 2

New Motor Carrier Reporting Rules

The Federal Motor Carrier Safety Administration (FMCSA) announced in a

Bill Syme TSI Motor Carrier Safety November 28, 2000, news release that all motor carriers will be required to file the Motor Carrier

Identification Report form MCS-150.

Starting December 26, 2000, the FMCSA will require motor carriers to update the information in this form every 24 months. This change is in keeping with

the Motor Carrier Safety Improvement Act of 1999.

FMCSA will enter the MCS-150 information into the Motor Carrier Safety Information System (MCMIS) and use the information to track motor carrier safety performance, to assess nationwide motor carrier safety trends and to evaluate effectiveness of Federal motor carrier programs.

Motor Carrier, continued on page 3

2001, continued from page 1

regulations will be in effect January 1st. These include updated carrier variations, and changes to IATA rules that are more restrictive than ICAO requirements.

From the UN and IAEA

So what types of changes will we see in the new IMO, ICAO, and IATA regulations? As usual, much of the content change comes from the UN Recommendations on the Transport of Dangerous Goods. There will be some new proper shipping names, changes to existing proper shipping names, and some variations to existing special provisions and packaging requirements. The biggest changes, however, don't come from the UN but from the International Atomic Energy Association (IAEA). The IAEA's latest guidelines for the transportation of radioactive materials are being incorporated in the IMDG Code and in the ICAO and IATA regulations. These new IAEA guidelines, known as ST-1, replace the previous Safety Series No. 6 document that the IAEA used for many years. ST-1 was actually published a few years ago but its requirements are only now being adopted by other transportation regulations. Look for an article in a future issue of FlashPoints detailing the sweeping new changes for radioactive materials and when we might expect to see these changes in 49 CFR.

The New IMDG Code

Format changes are the real big news for the IMDG Code. The big four-volume (plus supplement) Code has been replaced with a two-volume (plus supplement) Code. The shrinking of the Code was accomplished by eliminating all the separate packaging instruction pages that existed for each proper shipping name in favor of several dozen uniform ICAO/IATA-style packing instructions that are shared by many different materials with similar properties. That doesn't mean all the little pieces of useful information on those separate IMDG Code pages will be lost. The new "Dangerous Goods List" (formerly known as the "General Index"), has a separate "Properties and Observations" column which will reference flash points, colors, odors, dangers, and other physical properties. They put all that in the Dangerous Goods List? That's not the half of it. The new Dangerous Goods List has 18 columns. The first and last columns contain the UN number. And much to the consternation of some (and joy of others) the list is in numeric order by UN#, not alphabetical order by proper shipping name (PSN). If all you have is the proper shipping name, you need to look in the back of the book at an alphabetical listing of PSN's and UN#'s, get the UN# there, and then go back to the Dangerous Goods List. One good thing about this system is that the synonyms for PSN's that used to appear in the General Index in the same typeface as PSN's —causing much confusion—are kept in the back of the book and out of the main Dangerous Goods List. Referencing the alphabetical PSN list might be an extra step, but the 18-column list will actually save steps elsewhere. New helpful columns include limited quantity amounts authorized, IBC packing instruction numbers, and IMO & UN tank packing instruction numbers (no more separate packing tables for IBC's and tanks). Other notable changes in the new IMDG Code include:

- The elimination of the divisions in class 3 (though the documentation section still shows an example description with "Class 3.2" in it)
- The addition of a "Large Packaging" which is a package that has a capacity of more than 400 kg / 450 L, but is less than 3 cubic meters, and is designed to hold inner packages and articles (unlike an IBC which is a single package)
- A new hazmat training requirement including General Awareness, Function Specific, and Safety training for "shore-based personnel". Frequency of retraining is at the discretion of the competent authority (at least every three years in the US—49 CFR 172.704(c)(2))
- And the big one: <u>subsidiary hazard labels and placards</u> will now show the class number.

Two things that have not changed are the use of the "limited quantities of class ..." description which may be used instead of the PSN when shipping limited quantities, and the assignment of class "2" (no divisions) to the PSN "Aerosols". These provisions have caused much confusion in years past and many shippers and carriers don't like them. Those who do like them will be glad to see they are still there.

The thing to remember is that compliance with the new IMDG Code provisions is voluntary in 2001 and required in 2002. So subsidiary hazard labels on vessel packages in 2001 may or may not bear class numbers. Because the US DOT accepts use of the IMDG Code (49 CFR 171.12) for shipments that are only partly by vessel, there will be subsidiary hazard labels and placards with class numbers showing up on the highways and rails of the US as well. What about on aircraft? That's another curveball for us.

IATA Now, ICAO in July

The ICAO is also putting the hazard class number back on subsidiary labels. But since the ICAO instructions aren't official until July 1, 2001, airlines cannot adopt this rule yet. So on IATA-member airlines, subsidiary hazard labels cannot have class numbers on them before July 1, 2001, but then must have them starting on July 1, 2001. This also goes for all other ICAO changes.

2001, continued on page 4

Motor Carrier, continued from page 1

Filing is required in the following implementation sequence:

The last digit of your USDOT number determines the filing month. "1" is January, "2" is February, and so on. The next to last digit in the USDOT number determines the filing year. If it is even, the motor carrier must file in the even-numbered year, if odd, in the odd-numbered year.

<u>Example:</u> USDOT # 123456 would require a filing in June of each odd year starting in 2001.

There is no fee associated with these new requirements. For further information, see the Federal Register of Nov. 24, 2000, or visit the FMCSA web site at http://www.fmcsa.dot.gov

DOT Hazmat Registration Fee To Be Reduced?



The DOT has collected a lot of money under the expanded hazmat registration rules enacted this year (see Spring 2000 issue of *FlashPoints*). So much money was collected for the 2000-2001 registration year that the DOT is considering rolling back the new higher registration fees for the next six registration years. Under the Notice of Proposed Rulemaking (NPRM), HM-208D, the proposed registration fees would be \$250 for small businesses and non-profit organizations and \$475 for large businesses (plus a \$25 processing fee for all). Companies that have already paid the current larger fees a few years in advance would get a refund. For details, go to https://hazmat.dot.gov/register.htm and look at document # HM-208D.

Driver is Hazmat Employee

Those involved in carrying hazardous materials by highway in the United States are aware that the Federal Motor Carrier Safety Regulations (FMCSR) require drivers to have a hazmat endorsement for the commercial drivers license (CDL) before they can



drive vehicles which are "required to be placarded for hazardous materials" (49 CFR 383.93(b)(4)). The inverse is also true: if the vehicle is not required to be placarded for hazardous materials then a hazmat endorsement is not required for the CDL. So commercial motor vehicle drivers

in the U.S. who carry hazardous materials that don't require DOT hazmat placards (class 9 material, limited quantities, regulated medical waste, etc.) are not required to have hazmat endorsements on their CDL. That's where some employers make a wrong turn. No requirement by the DOT to have a hazmat endorsement is not the same thing as no requirement by the DOT to have hazmat training. A recent letter of clarification from the DOT addressed this issue. Here is a section of that letter which references sections and paragraphs of 49 CFR Parts 100-185, the Hazardous Materials Regulations (HMR):

Q1. Must a driver be trained if he will transport Class 9 materials in non-bulk packages?

- A1. The answer is yes. Section 172.704(a) specifies that all hazmat employees must receive general awareness, function specific and safety training. A hazmat employee is a person employed by a hazmat employer who during the course of his/her employment directly affects hazardous materials transportation safety (see § 171.8). Therefore, a person who performs duties that are regulated under the HMR is considered to be a hazmat employee and must be trained under Part 172, Subpart H.
- Q2. Who is required to maintain the training records for a driver?
- **A2.** Section 172.704(d) requires that a record certifying each hazmat employee's current training be created and retained by the hazmat employer.

So, drivers who carry hazardous materials are "hazmat employees" who require hazmat training—regardless of whether or not they need a hazmat endorsement for their CDL.

The DOT has many letters of clarification on file for all types of hazmat transportation issues. You can find them on the RSPA Office of Hazardous Materials Safety web site: http://hazmat.dot.gov under the *Rules & Regulations* section.

2001, continued from page 2

New PSN's, identification numbers, packing requirements, special provisions, etc., that come from the ICAO, appear in the 2001 IATA DGR now but cannot be used until July 1st. IATA denotes pre-July 1 entries with an hourglass symbol and post-July 1 entries with a calendar page symbol. For example, ICAO is changing the word "inhibited" in PSN's to "stabilized". This means each of these particular PSN's is shown twice—once with "inhibited" still in the PSN—and an hourglass symbol in the margin, and once with "stabilized" in the PSN—and a calendar symbol in the margin. Shippers must use the "inhibited" PSN's until July 1st and then must switch to the "stabilized" PSN's. Other significant ICAO/IATA changes that become effective July 1, 2001 include:

- Subsidiary hazard labels keep their class number.
- *ST-1* is incorporated into the regulations for radioactive materials—an entire new chapter in Appendix G will replace the current Chapter 10.
- New special provision "A8" explains exceptions for lithium ion batteries.
- Special provision "A81" for infectious substances extends its passenger aircraft quantity exception to all bodily fluids, not just blood and blood products.
- Segregation also takes subsidiary hazards into consideration, but Table 9.3.A for segregation of dangerous goods becomes less restrictive.
- Tentative proper shipping names are allowed for materials needing more testing for proper classification. No technical name will be necessary when using n.o.s. entries for these tentative names, but "sample" will be added. Example: "Flammable liquid, n.o.s., sample". (The US DOT has had a similar provision for years.)

What about 49 CFR Parts 100-185?

The US DOT accepts the use of the ICAO and the IMO hazmat regs for air and sea shipments respectively (if the additional requirements of 49 CFR 171.11 and 171.12 are also met). This acceptance includes those legs of transportation that are by highway before or after traveling by aircraft or vessel (and for the IMDG Code, rail legs also). For US domestic shipments, there is no legal requirement to use these international regulations. Those who are worried that there will be too much difference between these international regulations and the US DOT's own hazmat regulations found in 49 CFR 100-185 may not have to fret very long. Under docket # HM-215D, the DOT is proposing to incorporate into 49 CFR many of the new provisions found in the UN, ICAO, and IMO hazmat regulations, and under docket # **HM-230** the DOT is proposing to adopt provisions from the IAEA ST-1 document. These dockets are available on the internet at http://hazmat.dot.gov/rulemake.htm#nprm •

Class Numbers on Subsidiary Labels & Placards Transition Timeline

Jan. 1, 2001—Hazmat prepared in accordance with the IMDG

Code <u>may</u> have class numbers on subsidiary hazard labels and placards.

July 1, 2001—Hazmat prepared in accordance with ICAO/IATA regulations <u>must</u> have class numbers on subsidiary hazard labels.

Jan. 1, 2002—Hazmat prepared in accordance with the IMDG

Code <u>must</u> have class numbers on subsidiary hazard labels and placards.

Date for 49 CFR? If and when adopted, there would likely be a transition period until Oct. 1, 2005 (see HM-215D). If adopted, this does <u>not</u> mean that subsidiary hazard placards would then be required where they are not presently required by 49 CFR. ◆

Get Your New IMDG Code in a TSI Class!

In past classes on the IMDG Code, students were not able to keep the Code since the 4-Volume regulation was so expensive. In 2001, each student in TSI's IMDG Code classes will receive the new 2-Volume IMDG Code—theirs to keep. There will be no increase in



the course cost from last year. Classes are scheduled at TSI for **February 12-16** and **August 6-10**. Customized & on-site training available.

Let me check this list twice...
The model rocket engines are class 1.4, the junior chemistry sets can go as class 9, and the perfume is flammable but is reclassed as a consumer commodity. Great, that's a good shipping paper.

Have a Happy and Safe Holiday Season!



Paul Ruby Bill John Bob Jon Lisa Cindy